ID de Contribution: **43** Type: **Non spécifié**

Gamma-Ray Bursts with the ANTARES neutrino telescope

mardi 19 mai 2009 10:45 (30 minutes)

Gamma-ray bursts (GRBs) are powerful cosmic particle accelerators producing a highly variable flux of high energy gamma-rays. Under the assumption of hadronic acceleration in jets, a copious flux of neutrinos can be expected. Among the possible astrophysical sources, GRBs offer one of the most promising perspectives for the detection of cosmic neutrinos thanks to an almost background free search.

The ANTARES neutrino telescope was completed in May 2008. The collaboration has implemented two different methods to search for GRBs: the first one is based on the search for neutrino candidates relying on the time and position information provided by an external trigger and the second one is based on the optical follow-up of "special neutrino events". The use of these two complementary techniques provides enhanced sensitivity to these transient sources.

Auteur principal: Dr ESCOFFIER, Stephanie (CNRS/IN2P3/CPPM)

Orateur: Dr ESCOFFIER, Stephanie (CNRS/IN2P3/CPPM)

Classification de Session: GRBs from the observation prospective and implication for GWHEN searches